II. PHYSICAL CHARACTERISTICS OF SUBDIVISIONS

The most basic property type associated with this historic context is that of the subdivision itself. A subdivision as studied in this historic context is a residential community located near a core city, distant from the urban center but linked to it by employment ties. This chapter will explore the national trends that shaped the physical appearance of the suburbs and the ways in which those trends were reflected in the subdivisions surrounding Wilmington, Delaware. These trends shaped both the designs of suburban subdivisions and their use of space; they also affected the types of homes built to house new residents. The chapter finishes with a set of criteria to be used for the evaluation of the significance and integrity of subdivisions as physical property types.

Perception and Use of Land and Landscape

The rapid increase in urbanization that marked the growth of industrialization during the late nineteenth and early twentieth centuries proceeded largely unplanned and unchecked. Cities' crowded, noisy streets, fetid air, lack of trees, and dearth of greenery loomed in striking contrast to the pastoral ideal of the surrounding rural landscape from which many people had migrated and to which they looked for standards of morality and virtue. The creation of urban parks, marked by big expanses of lawn and shady trees, was undertaken in an effort to bring restorative nature into the city. Landscape architects believed that parks "should provide a contrast to the existing city, a refuge from its noise, its oppressive darkness, from the crowdedness and the inhuman surfaces of the streets."[14] The 1881 annual report to the Commissioners of Boston's Department of Parks stressed how great a contrast the rural character of the parks was to the surrounding city. "An influence is desirable, however, that, acting through the eye, shall be more than mitigative, that shall be. . .antidotal. Such an influence is found in what will be called the enjoyment of pleasing rural scenery."[15]

One of the basic values that undergirded this motivation to build havens of nature within the unnatural atmosphere of the city has been called "moral environmentalism"[16] or, alternatively, "environmental determinism."[17] Regardless of the name, the philosophy maintained that "the visual and

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[14] Heckscher, 171; see also Boyer, 31.

[15] Olmsted, 249.

[16] Schulz, 156.

[17] Johnson, 24.

sensual properties of the built environment. . .had a profound impact on the morals, life styles, and views of the world held by city dwellers."[18] The contrast was drawn between the city's powerful degrading and dehumanizing atmosphere and the healing capacity of nature to restore both spiritual and physical vitality. Such infusions of nature were to be found in the small slices of countryside reproduced in the city parks. "Calling for public parks and the rural beautification of cities, the landscape architects evidenced their faith in the morally uplifting, healing qualities of nature."[19] The 1881 report on Boston's parks concluded that "It is the. . .crowded condition of a city that makes the sight of merely uncrowded ground in a park the relief and refreshment to the mind that it is."[20] An 1895 history of the first forty years of Central Park reached a similar conclusion. "The kind of recreation that these large parks supply. . .is that which a man insensibly obtains when he puts the city behind him and out of his sight and goes where he will be under the undisturbed influence of pleasing, natural scenery."[21]

Even before the widespread creation of city parks, according to Schuyler, rural cemeteries provided a respite from city pressures.

> At first the justification for rural rather than urban cemeteries was concern for public health and the inadequacy of downtown space for burial, these cemeteries became rural retreats frequented by city residents in search of contemplative recreation, (reflecting a belief in) the need for publicly constructed and maintained parks to bring country into the city.[22]

The early cemeteries resembled parks in their designs, which included circular drives and undulating paths and exhibited marked contrasts to the hard lines and straight streets of the city. The same pattern of curvilinear thoroughfares was repeated later in such nineteenth-century suburban developments as Llewellyn Park, New Jersey, and Riverside, Illinois, that were planned and created for wealthy residents.

Parks and rural cemeteries as a source of restorative nature were elevated to an ideal by the end of the nineteenth century. This ideal constituted an important part of the psychological groundwork for the subsequent attraction of new suburbs built outside the crowded city. Promising the same fresh air, sunshine, and shade trees that city dwellers had come to expect from the greenery of urban parks and nearby cemeteries, the new suburbs proffered the opportunity to enjoy a reunion with nature that

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[18] Ibid.

[19] Schulz, 156.

[20] Olmsted, 262.

[21] Doell and Fitzgerald, 33.

[22] Schuyler, 37.

urbanites had previously been able to sample only occasionally and only away from their crowded apartment homes.

Wealthy residents were the first urban dwellers able to live in the country and travel into the city for work. Because of the nature of their jobs, they enjoyed flexible work schedules so that slow transportation between rural homes and city jobs presented no problem. They set an important example of style by establishing their rural villas. Although the palatial homes often began as week-end or summer retreats, they were eventually elevated to full-time residences.[23] Llewellyn Park, New Jersey, laid out in the mid-1850s by landscape architect Andrew Jackson Downing, has been characterized as the most influential early American suburb.[24] It clearly anticipated the transition from the nineteenth-century individual rural villa to the twentieth-century residential community linked to the city by ties of employment. Designed with curving streets, large wooded tracts, and extensive parkland, the suburb made possible "the enjoyment of a country gentleman's park in the then-popular romantic style . . . for several hundred families, each of whom was responsible individually for the upkeep of only one acre."[25]

Downing's example was followed in the next decade when Olmsted, Vaux and Company created plans for Riverside, a suburb on the outskirts of Chicago. Winding streets and paths, generous parks, and carefully articulated building and landscaping instructions were combined to create "'refined domestic life, secluded, but not far removed from the life of the community."[26]

These initial, nineteenth-century suburban communities were "select places" designed and intended for the wealthy.[27] By the turn of the century, however, improved technology had lowered both transportation and building costs, thus enabling ordinary wage earners to relocate to the suburbs and still hold city jobs. The less affluent members of society, following the lead of their wealthy bosses, sought relief from the hurly-burly of the urban environment in their new suburban homes. In their efforts, they were advised by the popular press. Responding to the query "Where to Build Your Home," one writer admonished "new country home-makers" to seek out good surroundings. "The time may come when you wish to sell, and in that case a well-shaded home, reached by a well-shaded and well-kept avenue will double the market price of your property."[28]

Although the wealthy suburbs had set an example of curvilinear streets, ample shade, and large lots, most middle-class families who moved to suburbs during the first two decades of the twentieth

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[23]See Warner, *Streetcar Suburbs*, Chapter 1; Jackson, Chapter 1; Fishman, Chapter 5; Keating, Chapter 1; Gowans, Chapter 2.

[24]Schuyler, 156.

[25]Warner, *Urban Wilderness*, 209; see also Schuyler, 159.

[26]Olmsted, Vaux & Co., *Preliminary Report Upon the Proposed Suburban Village at Riverside*, 16-17, quoted in Schuyler, 163.

[27]Wright, 98; Warner, *Urban Wilderness*, 209.

[28]*Sunday Morning Star*, 20 March 1910, 15.

century encountered the urban grid repeated on the rural landscape. Warner's examination of the Russ Sage Foundation suburban experiment in 1911 at Forest Hills, Long Island, led him to conclude that "community planning features of curvilinear streets, cul-de-sacs, playgrounds, parks, and unified shopping centers would be adopted by subdividers only if local government regulations required them." In an attempt to minimize costs and maximize profit and efficiency, developers divided their land in designs that yielded the greatest number of building lots and reduced both the volume of land used for streets and the cost of installing urban utilities.[30] An author for a February 1928 issue of *Outlook* described the suburbs she encountered as "neat little toy houses on their neat little patches of lawn . . . all set in neat rows, for all the world like children's blocks."[31]

Once plans had been drawn up and lots designated, deed restrictions and covenants frequently insured that the developers' schemes were not frustrated. In the period immediately after World War I, fc example, developers exerted their own "aesthetic and social controls . . . The middle-class suburbs of the 1920s had covenants with regulations governing their style of architecture, the size of houses, policy toward cars, proximity of business and commerce, and restriction of entry to ethnic and religious minorities."[32] The deeds used to convey building sites in Palos Verdes, California, in the 1920s include covenants designed to exclude certain racial groups. At the same time, the suburb's restrictions on the value of the houses that could be constructed there established cost barriers to less prosperous families.[33]

Land and Landscape in Wilmington

Wilmington experienced substantial population growth during the third quarter of the nineteenth century. Between 1850 and 1880, the population more than tripled, increasing from 13,979 to 42,478. Like other urban areas, the city began to feel a pressing need for the refreshment offered by city parks. Beginning in the 1860s and through the 1870s, various citizens' committees concerned themselves wi the establishment of a park for the city but no action was taken. Finally, in 1883 William P. Bancroft, whose family had founded textile mills on Brandywine Creek, provided the most powerful impetus for the creation of a park when he offered 50 acres of land along the river. His gift came with two conditions, however: th

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[29]Warner, *Urban Wilderness*, 210.

[30]Warner, *Streetcar Suburbs*, 138-9; Schuyler, 154; Wright, 104.

[31]Christine Frederick, "Is Suburban Living a Delusion?" *Outlook*, 148 (22 February 1928) 290, quoted in Wright, 196.

[32]Wright, 157; also Howe et al., 1.

[33]Marsh, 170.

the city purchase approximately 35 adjacent acres and that the road leading to Bancroft Mills "which would be within the park, would not be closed without consent of the (factory) owners."[34] (Figure 3)

By the time of his death in 1928, Bancroft had given some 200 acres to the city and had served on various park commissions for over 40 years. In addition, he had been instrumental in engaging Frederick Law Olmsted and his firm of landscape architects to lend their expertise to the design of what became Brandywine and Rockford parks and Kentmere Parkway which links the parks. Olmsted, who with his partner, Calvert Vaux, had designed New York City's Central Park, was a leading proponent of the restorative powers of parks. His 1883 report to the Wilmington Park Commissioners reiterated his conviction that parks were vital to the city's health and that the committee had a key responsibility to safeguard the lives of Wilmington's citizens.[35]

By 1895 the city had dedicated over 250 acres to municipal parks.[36] The turn of the new century witnessed the establishment of two amusement parks outside the city as well. The Wilmington City Railway Company and the Peoples Railway Company peppered the pages of Wilmington's newspapers through the summer months with advertisements inviting city dwellers to visit Shellpot Park along Philadelphia Pike and Brandywine Springs Park in rural Christiana Hundred. The trolley companies appealed to working people without long summer vacations who had to squeeze their relaxation into the Saturday afternoon and Sunday that was their respite from labor. The companies presented their respective parks as summer "resorts" and the five-cent trolley ride as a country excursion.

Shellpot Park stressed the "cool breezes" to be enjoyed, published a booklet describing the beauties of the park, referred to itself as a "popular resort," and emphasized the park's appeal to the entire family.[37] Brandywine Springs Park did the same. Its opening full-page advertisement in May 1900 mentioned such resort features as a boardwalk, launch rides on the lake, and band concerts.[38] In the months and years that followed, the owners repeated the "resort" label and encouraged the "resort" image for the park. Both parks published weekly listings of the programs offered to Wilmingtonians who ventured into the country by trolley.

An examination of the two types of parks created between 1880 and 1910--the municipal parks of the parks movement and the amusement parks owned and promoted by the trolley companies--provides important insight into aspects of early suburbanization. On the one hand, city parks sought to nurture in city dwellers an appreciation of the benefits of shady trees, rolling hillsides and green meadows, flowing

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[34]Thompson, 82.

[35]Ibid., 84.

[36]Hoffecker, *Wilmington, Delaware: Portrait of an Industrial City, 1830-1910*, 62.

[37]*Sunday Morning Star*, 1 July 1900, 2; 20 April 1902, 6; 24 June 1906, 11; 29 July 1906, 3; 28 July 1907, 12; 3 May 1908, 6.

[38]Ibid., 27 May 1900, 6.

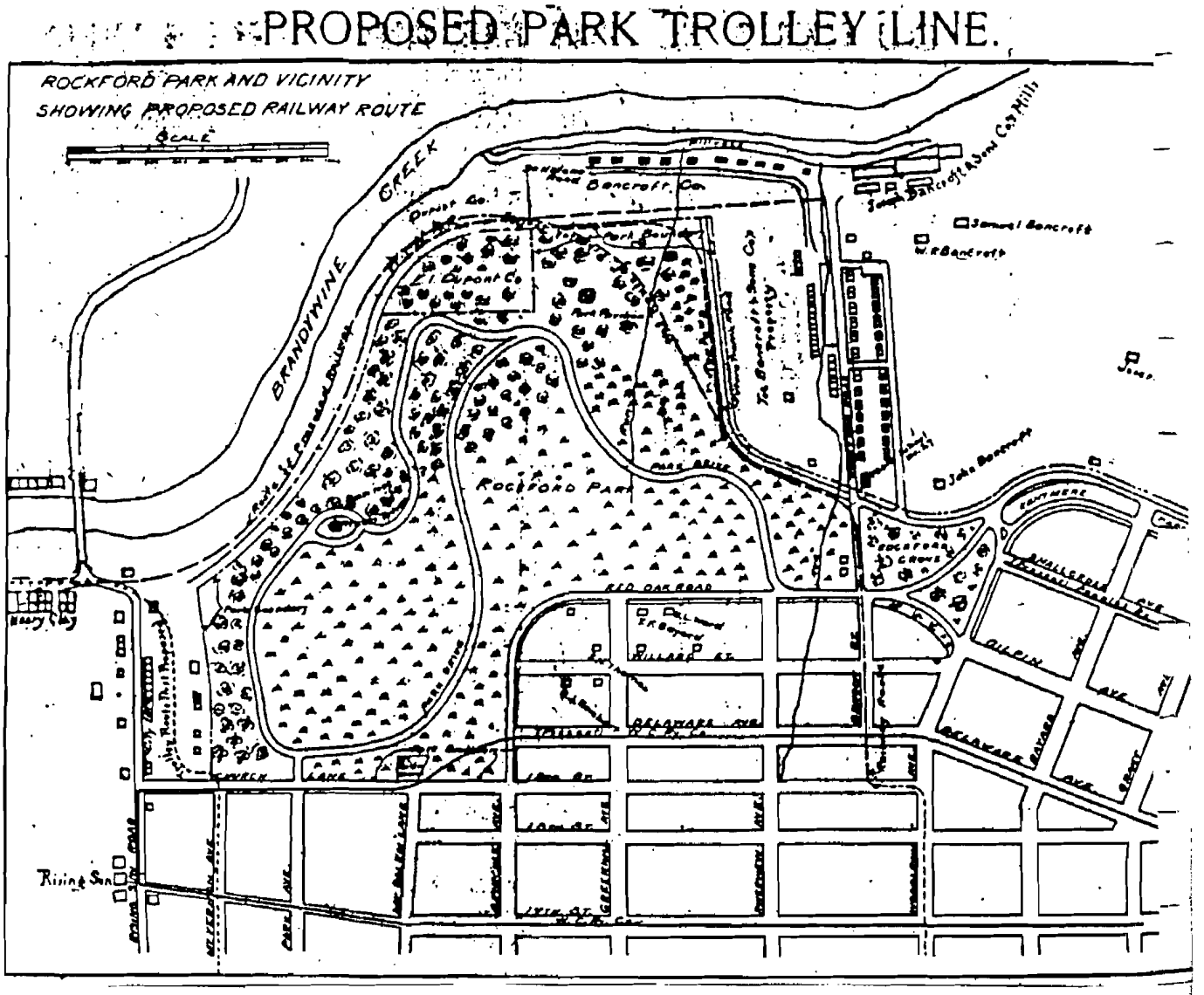

Figure 3 : Map of Brandywine Park

water, and fresh air. The theme of healthfulness and the beauty of nature recurs in the advertising for early suburbs. Penn-Rose, located on Philadelphia Pike between the city line and Shellpot Park, allowed one to move "from the over-crowded district into the pure air and sunshine of the suburbs and stop those doctor bills."[39] Montrose, farther north on Philadelphia Pike, was "that beautiful tract of land, over-looking the Delaware river;"[40] Gordon Heights (Brandywine Hundred) was a "superb scenic tract . . . sloping towards the Delaware River;"[41] and Ashley, along Maryland Avenue, boasted of the "most picturesque building sites around Wilmington."[42]

Suburban development companies also adopted an advertising technique of the trolley-owned amusement parks, employing the image of an excursion to the country to persuade potential buyers to visit the new subdivisions. Banner headlines proclaiming development names were followed by such inducements as "How are you going to spend Sunday? Why not take your wife out to Penn-Rose at our expense?"[43] or "Free Excursion Cars Sunday."[44] The Ashley Syndicate, at its subdivision adjacent to Elsmere and Richardson Park, followed the park example to the extent that it provided a free band concert at the site on 4 July 1909, stressing that since it was Sunday, the concert would be of sacred music.[45]

Although Wilmington's experience with rural cemeteries was limited, the Wilmington and Brandywine Cemetery provided a degree of relief from the city. Adjoining what became Brandywine Park, the cemetery offered a picturesque view of the river, shady trees, and pleasant curving paths with names like Magnolia Circle and Oak, Spruce, Linden, and Holly Avenues, a setting hospitable to an afternoon stroll (Figure 4).

Similarly, the city had little opportunity to observe the establishment of rural villas as they occurred in other urban areas. While the du Pont family had maintained homes in the country, it was more a matter of the family and their employees living near the powder mills that were their livelihood. However, during the 1920s, there began some movement by members of the du Pont family and their company executives to establish country homes in Christiana Hundred--palatial residences with aristocratic names. By the time this had occurred, substantial suburban development was already underway. On the other hand, the varied and substantial architecture built and the geographic location of "chateau country" were examples that were followed on a smaller scale when Westover Hills (on Kennett Pike) was established at the end of the 1920s.

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[39]Ibid., 12 July 1903, 8.

[40]Ibid., 6 April 1902, 8.

[41]Ibid., 23 May 1909, 6.

[42]Ibid., 30 May 1909, 6.

[43]Ibid., 12 July 1903, 8.

[44]Ibid., 30 May 1909, 6; 20 June 1909, 6.

[45]Ibid., 4 July 1909, 6.

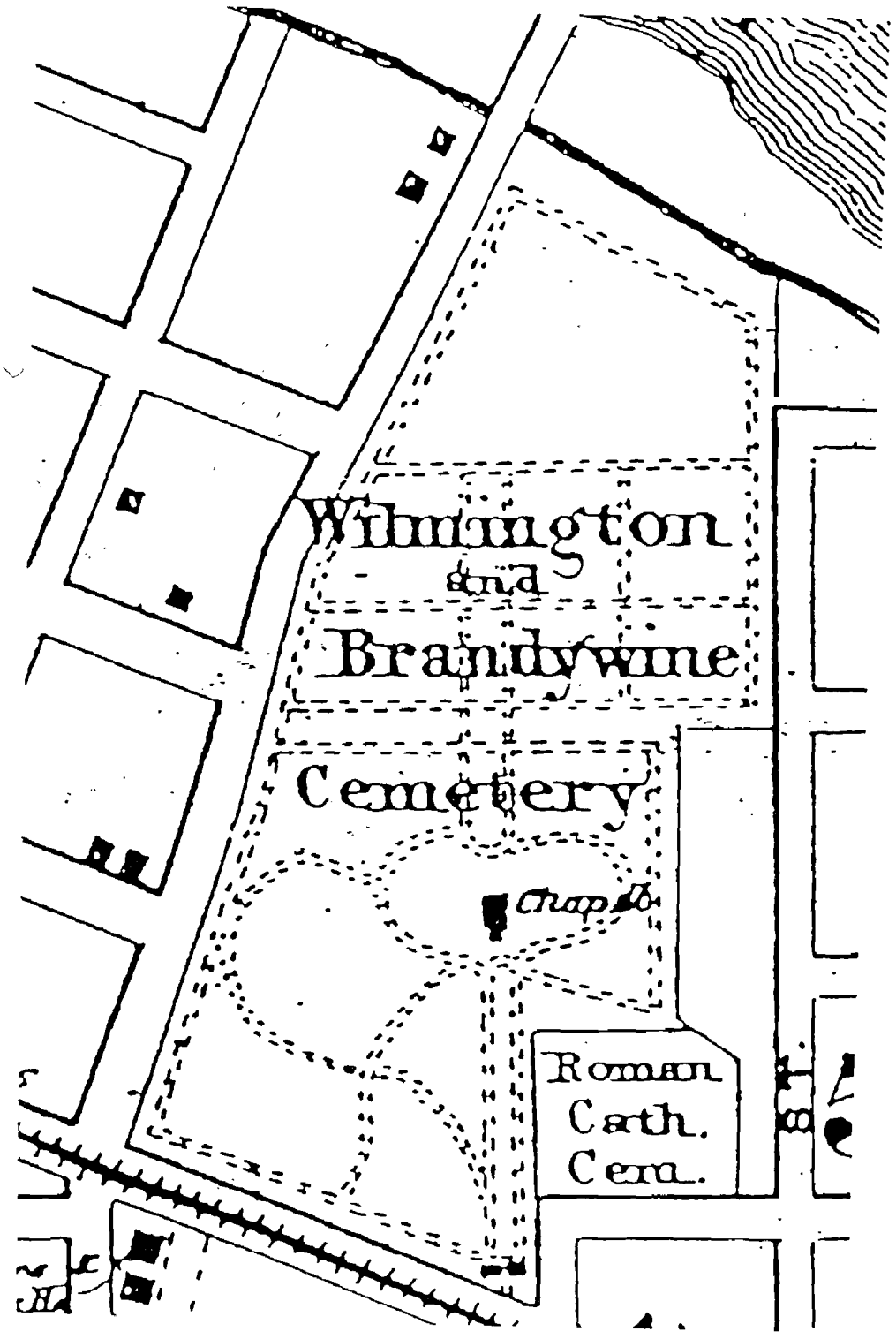

Figure 4: Map of Wilmington and Brandywine Cemetery.

The Process of Suburbanization

Suburban development is the creation of a residential community around the periphery of a core city but distant from the urban center yet linked to it by ties of employment. During the period from 1880 to 1950, such subdivisions were the product of a series of steps beginning with the acquisition of land for conversion to residential use from some other occupation, frequently agriculture. The land parcel, whether several acres or a narrow strip along a private lane, was then divided into building lots intended for detached or semi-detached homes.

The provision of urban amenities (water, electricity, gas, sewer services) varied both with time and with the socioeconomic status of the clientele which the developer saw as the most likely market for the new subdivision. In the early years of the century, development companies took particular care to call attention to a new subdivision's improvements that rendered the land "developed." As early as 1902, the Suburban Land Company advised potential customers that Hillcrest (Brandywine Hundred) was provided with "crushed granite sidewalks,"[46] Montrose Terrace (Brandywine Hundred) had "streets, avenues, and sidewalks (were) laid out according to the plan of Engineer Francis A. Price;"[47] and the Ashley Syndicate had laid down "winding and graded streets (and) granolithic sidewalks"[48] on its property.

Nonetheless, some improvements were undertaken by residents. The Women's Civic Club of Richardson Park (Christiana Hundred), for example, was responsible for the installation of a street light at the foot of Race Street in 1917 and, the following year, paid for 65 loads of cinders (at $1 per load) to be spread on Eureka Street.[49] In later years, buyers came to expect such services as water, gas, electricity, sewers, and graded streets, but as late as the 1940s, residents often had to organize into civic associations and tax themselves to upgrade the quality of what had become standard improvements. The first home owners in Edgemoor Terrace, for example, undertook the tasks of paving the subdivision's graded but unpaved streets and then negotiated to have the county assume responsibility for future maintenance.[50]

In the opening decades of the century, once the land had been divided into lots, prospective residents purchased land on which to build and fully paid for the land before proceeding to arrange with a contractor for the construction of their houses. At the same time, some contractors themselves, who were

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[46]Ibid., 9 November 1902, 8.

[47]Ibid., 3 June 1906, 12.

[48]Ibid., 23 May 1909, 12.

[49]MS history of Women's Civic Club of Richardson Park.

[50]Interview with Carl Hauger, first treasurer of the Edgemoor Terrace Civic Association, 24 July 1991.

ordinarily a different group from the land developers, acquired land on which to erect houses not for their own occupancy but for sale. This enterprise was frequently on a small scale, ranging from as few as one or two dwellings to as many as six or eight, but rarely exceeding eight. During the 1920s, Frank A. Levering, calling himself a builder, operated as a contractor in the Richardson Park-Ashley area, buying lots in pairs and erecting two houses at a time. He employed the same crew on each job and built two basic styles in the new Christiana Hundred subdivisions.[51] William Potter, working on a slightly larger scale, built six bungalows on Laurel Street in Gwinhurst (Brandywine Hundred), advertising them for sale in 1925.[52]

During later decades, the roles of land developer and building contractor began to merge, so that land and house came to be offered to buyers as a single package. The principals of the Wilmington Construction Company identified themselves as "owners & builders" in their 1939 advertisement offering houses for sale in Edgemoor Terrace. Instead of selling lots as earlier developers had, the company offered dwellings "of solid stone and brick construction" on lots that were "graded, sodded, seeded and shrubbed."[53] This process, however it changed over time, was always focused on the production of private housing in settings apart from the urban center to which residents traveled for work.

A total of 182 subdivisions that can be considered suburban to Wilmington were identified in Brandywine, Christiana, Mill Creek, and New Castle hundreds for the period from 1880 to 1950. Prior to 1900, only one subdivision, Elsmere, was planned, having been laid out in 1886 by Joshua T. Heald, a Wilmington banker and real estate developer. A company map of the subdivision in 1889 bore a legend declaring "Elsmere. Wilmington's New Suburb. Beautiful Home Sites. Terms Easy."[54] Of the 182 subdivisions, only one--Chincilla Farm in Brandywine Hundred--could not be located and examined because the plan map was prohibitively vague. Another five[55] were planned but never developed for residential use.

In each decade between 1900 and 1940, a single hundred accounted for at least half of all the subdivisions planned. From 1900 to 1920, Christiana Hundred had more than half of the proposed subdivisions, all within three to four miles of the city center; from 1921 to 1940, Brandywine Hundred was the focus of development, still within a range of four miles. In the final ten-year period, Brandywine, Christiana, and New Castle hundreds shared in suburban growth.

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[51] Interview with Blair Levering, Frank A. Levering's son, 10 February 1992.

[52] *Sunday Morning Star*, -- October 1925, --.

[53] *Journal-Every Evening*, 6 May 1939, 17.

[54] *Elsmere*.

[55] Brandywine Hundred: Cliffs Heights, Rutter Tract, Silver Croft; Christiana Hundred: Elliott Property, Homestead.

TABLE 1: Distribution of Subdivisions By Hundred, 1900-1950

Hundred	1900-10		1911-20		1921-30		1931-40		1941-50		Total
	#	% by hundred	#	% by hundred	#	% by hundred	#	% by hundred	#	% by hundred	
Brandywine	5	5	16	17	18	19	31	33	23	25	93
Christiana	10	16	19	31	9	15	12	16	11	18	61
Mill Creek	2	40	0	0	1	20	1	20	1	20	5
New Castle	2	9	5	22	2	9	2	9	12	52	23
Total Number	19		40		30		46		47		182
% of Total	10		22		16		25		26		100

Within the subdivisions, lots ranged in size from long, narrow plots measuring 20' by 125' to substantial 160' by 250' parcels. There was a tendency for lot size to increase with time, but lot size alone can be deceptive. Frequently, lots had to be purchased in multiples to meet dwelling size limits imposed by deed restrictions. Thus, although the standard lot size in Gwinhurst was 20' by 100', to meet the seller's demand that no house could be built on a lot less than 40 feet across the front, buyers had to purchase at least two lots to accommodate a house.

Because there was no zoning to govern the way the early suburban land was developed, firms who sought to attract buyers recognized that certain land use restrictions were essential to insure that the communities to be built would be pleasant and hospitable. Developers achieved the necessary control by including restrictions in the deeds by which the land was conveyed. In addition to designating minimum widths for the fronts of houses, covenants also established building lines at least 25 feet from the street and, in some cases, set a minimum value for dwellings constructed on the lots; in the earliest years, $1,000 was the most common minimum and it increased with time to $4,500 in the 1940s. One deed added a detailed list of other prohibitions: no blacksmith shop, currier or machine shop, piggery, slaughter house, public stable or livery, soap, glue, or starch factory or any trade or business.[56]

Four characteristics can be used to distinguish and describe the subdivisions created around Wilmington:

1. the degree to which streets in the subdivision are straight or curving;
2. whether the subdivision is made up of only one or two streets or of three or more;

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[56]Deed Record I-33-35, 15 September 1924, transfer of land in Bellefonte, Brandywine Hundred, from Hugh and Mary Eastburn to Claude Banta.

3. whether access limited to a single road into the subdivision;

4. the degree of architectural variety among subdivision dwellings.

The characteristics occur in a variety of combinations. Roselle, for example, has several straight streets laid out in a grid with several streets providing access to Kirkwood Highway. Because the subdivision was planned in 1901 and construction took place over several decades, there is substantial variety in the architecture of the houses built there. On the other hand, Swanwyck Gardens (Christiana Hundred), planned in 1948, is made up of a single straight dead-end street on which one basic style of house was erected. No single combination of characteristics predominates among the subdivisions studied. On the other hand, certain trends can be discerned in each of the characteristics.

From the turn of the century until the 1920s, virtually all the subdivisions laid out in the Wilmington vicinity were made up of straight streets, following what was the national preference for the grid. From 1900 to 1910, 16 of the 18 subdivisions platted followed a grid; between 1911 and 1920, all but one of the 38 subdivisions were gridded. Ashley, established in 1909, was an exception but the curvilinear design is explained at least in part by the topography of the land on which it was built. Created to use a hilly site just off Maryland Avenue, the subdivision's streets wind around the contours of the land. Nine years later, the developers of Claymont Heights combined straight and winding streets in their plan, the curving streets being designed to follow the courses of two small streams on the property. In the hilly portion of the land nearest Philadelphia Pike, a straight grid was laid down and streets run up the face of the hill rather than encircling it. During the 1930s only slightly more than half (21 of 40) of the subdivisions were made up of straight streets; in the following decade, only two-fifths of the subdivisions (19 of 26) used straight streets (Figure 5).

The increased use of curving rather than straight streets may be at least partially explained as a method of providing a more scenic appearance for a subdivision and of insuring that motor traffic moved through residential areas at a suitably slow pace. In addition, one must also recognize that this was also a period of change in highway design. During the 1920s, parkways, with their curving routes, limited access, and parklike landscaping, became popular. These thoroughfares provided a clear alternative for developers planning subdivision streets. In Delaware, this influence was exerted by the du Pont Parkway started in 1911 and completed in 1924.

There was a slight increase in the incidence of one- or two-street subdivisions over the 50 years under consideration, although the tendency was not as pronounced as that toward curvilinear streets. Examined in terms of absolute numbers, the cumulative incidence of such subdivisions nearly tripled between 1910 and 1920. This was followed by slower growth that was nonetheless steady (Figure 6).

As was the case with the incidence of one- or two-street subdivisions, Brandywine Hundred data on the incidence of subdivisions with limited access follow a steady upward trend. This tendency is mediated, however, by the addition of data from Christiana Hundred, where the no clear pattern is established. Over all, the incidence of subdivisions with a single access road increases from 17 percent in

FIGURE 5

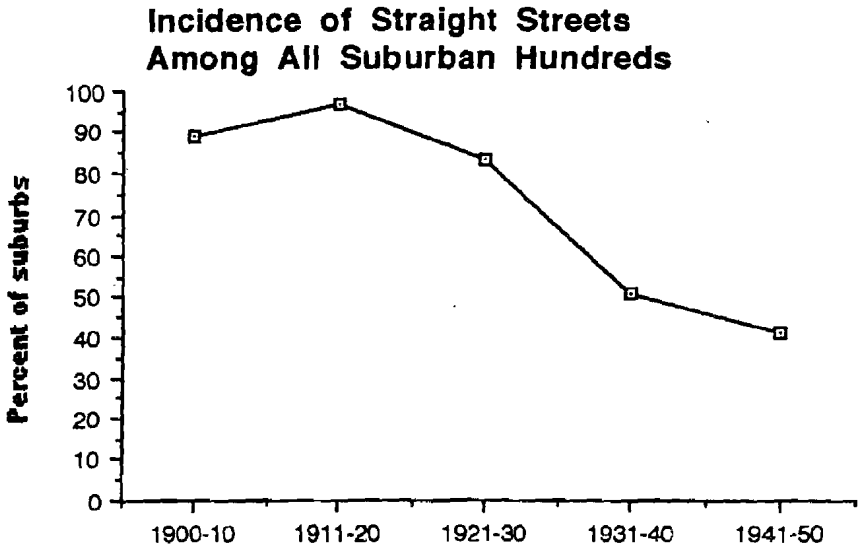
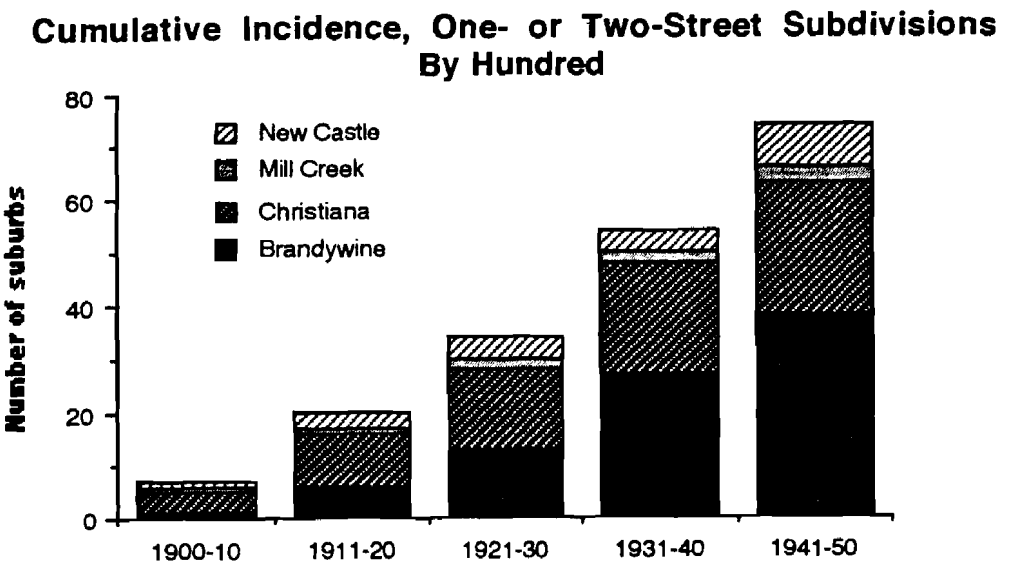

Incidence of Straight Streets
Among All Suburban Hundreds
Percent of suburbs
100
90
80
70
60
50
40
30
20
10
0
1900-10
1911-20
1921-30
1931-40
1941-50

FIGURE 6


Cumulative Incidence, One- or Two-Street Subdivisions
By Hundred
Number of suburbs
80
60
40
20
0
New Castle
Mill Creek
Christiana
Brandywine
1900-10
1911-20
1921-30
1931-40
1941-50

the first decade of the century to 34 percent by 1950. Figure 7 illustrates that, while the growth never falters, neither does it surge. On the other hand, it clearly demonstrates that by the end of the period fully one-third of the subdivisions were limiting access. In some cases, there was a single road which gave onto an internal complex of roads, as in Pembrey (off Foulk Road) or Delaire (off Philadelphia Pike); in other cases, the subdivision was created on a straight dead-end road like Clearview Manor (New Castle Hundred) or Gumwood (Brandywine Hundred), testimony in at least some of the cases to the shrinking volume of land available for development. As the automobile became more common toward the end of the context period, there was an increasing tendency of the subdivisions to have only a single access road connecting the interior street network of the subdivision to the nearest highway. There are a number of reasons to relate the increase in limited access to the increase in reliance on the automobile.

The developers of the streetcar subdivisions provided multiple access streets from the primary transportation route into the subdivision because residents walked from the trolley stop to their houses and needed as direct a pedestrian route as the subdivision's grid pattern would allow. With the automobile replacing the trolley and commuters driving directly to their houses, developers offered an alternative subdivision design. By providing a single road into and out of a subdivision, the plan limited the volume of vehicular traffic on subdivision streets by negating their effectiveness as pathways across the suburban landscape. A single means of access also encouraged a sense of community by suggesting to residents that only people who belonged there would venture into the subdivision; strangers were not expected to wander through.

There has been a general decline in the variety of architecture found in all the hundreds over the half century examined. Due to the limited availability of financing for construction, dwellings in the earliest subdivisions were constructed over a long period of time, in many cases over several decades. This resulted in a high degree of variety, since houses from different periods tended to follow changing fashion. For example, a subdivision like Ashley, which was planned in 1909, has residential building from at least four decades: *circa* 1910 frame four-square houses clad with shingles, *circa* 1920 bungalows in stone, brick, and clapboard, *circa* 1930 frame hip-roofed dwellings, and *circa* 1950 brick colonial revivals. Subdivisions that were laid out later followed a different development process in which the land was subdivided and all the houses were built in a short period of time. Edgemoor Terrace, established on Governor Printz Boulevard in 1939, is a premier example of a subdivision where this was the process. There are two or three basic styles of houses, each varied by being rotated by 90° to provide visual interest. This pattern of development and the resulting decline in architectural variety became the hallmark of suburban plans of the 1950s and after. Figure 8 illustrates this downward trend.

FIGURE 7

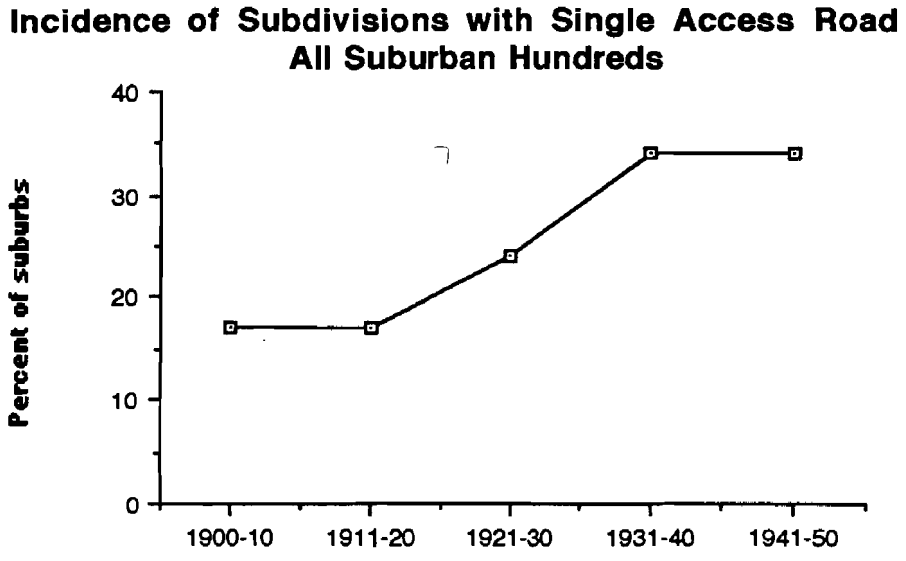
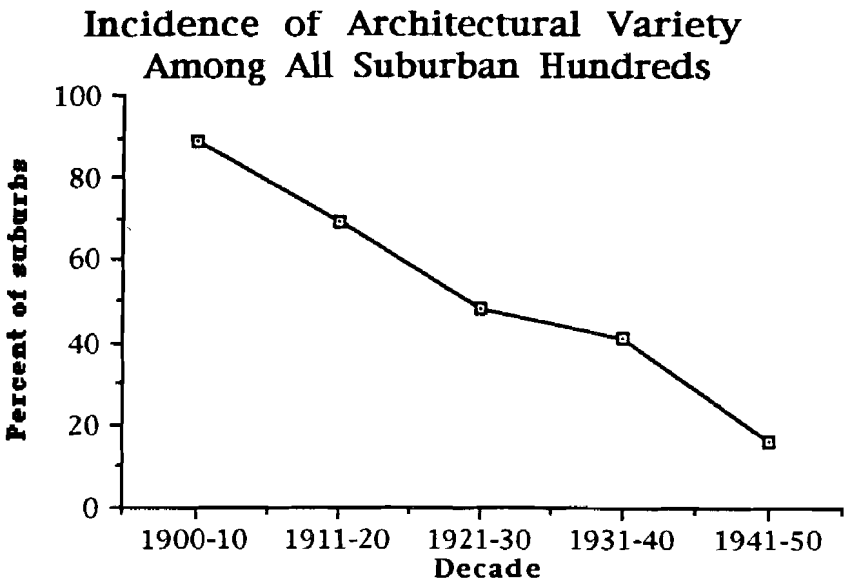

Incidence of Subdivisions with Single Access Road
All Suburban Hundreds
Percent of suburbs
40
30
20
10
0
1900-10
1911-20
1921-30
1931-40
1941-50

FIGURE 8


Incidence of Architectural Variety
Among All Suburban Hundreds
Percent of suburbs
100
80
60
40
20
0
1900-10
1911-20
1921-30
1931-40
1941-50
Decade

Property Types Related to Physical Characteristics of Subdivisions

The physical traits used to describe the subdivisions provide a means of discerning identifiable property types. The four characteristics relating to the nature of the streets, their number, the degree of access to the interior of the subdivision, and the level of architectural variety can be combined into 24 possible permutations, such as **single straight streets/ limited access/ high degree of architectural variety.** Of the various combinations that might be formed, four account for over half of the 182 subdivisions examined.

Multiple straight streets/ multiple access roads/ high architectural variety was the most common of the property types found among the subdivisions. Each of these subdivisions is laid out in a basic grid, with several streets that connect it to the nearest adjacent highway. These subdivisions are Wilmington's oldest, having been laid out between 1901 and 1929 along the city's trolley lines. They followed the urban pattern of linear, square street arrangement. Because of their establishment early in the century, construction of dwellings took place over several decades, accounting for the marked variety in residential architecture.

Multiple straight streets/ multiple access roads/ moderate architectural variety was the second most common subdivision property type. These subdivisions also follow a basic grid pattern with many streets allowing access. Because these subdivisions were established later than those identified as having a high degree of architectural variety, the period over which dwellings were built is shorter and the variation among the dwellings is more limited.

Multiple curving streets/ multiple access/ moderate architectural variety is one of several property types which may be found among subdivisions planned in the 1930s and 1940s. By the time these subdivisions were established, reliance on trolley service had declined substantially and subdivision residents depended upon their automobiles for transportation. While continuing the earlier practice of allowing multiple means of access to the subdivision, the developers began to plan streets that were more winding. As noted earlier, this may have reflected an interest in more effective traffic control as well as an interest in a more picturesque landscape.

Single straight street/ limited access/ high architectural variety describes the subdivision property type which is a straight dead-end street. Many were laid out in the 1920s and 1930s so the extended period during which dwellings were built accounts for the variety among the houses. While some were adjacent to trolley lines, most were located in areas where the automobile was the primary means of family transportation. The same configuration of **single straight street/ limited access** is found in the 1930s and 1940s, but rather than high architectural variety, there is only limited

architectural variation among the dwellings. This combination (**single straight street/ limited access/ limited architectural variety**) constitutes another subdivision property type.

During the period from 1920 through 1939, the use of multiple means of access characterized several subdivision property types that appear to bridge the period of transition from reliance on trolley transportation to dependence on the automobile. They differ from one another most in the degree of architectural variety found among the dwellings constructed within the subdivisions. The property types which have in common multiple roads for access are:

single straight street/ multiple access/ limited architectural variety
single straight street/ multiple access/ moderate to high architectural variety
multiple straight streets/ multiple access/ limited architectural variety
multiple curving streets/ multiple access/ limited architectural variety
multiple curving streets/ limited access/ moderate to high architectural variety

From 1930 through 1949, the increasing use of limited access characterized several additional subdivision property types that appear to be closely linked to the advent of the automobile. They too differ from one another most noticeably in the degree of architectural variety found among the dwellings constructed within the subdivisions. The property types that have limited access in common are:

multiple straight streets/ limited access/ moderate to high architectural variety
single curving street/ limited access/ limited architectural variety
single curving street/ limited access/ moderate to high architectural variety
multiple curving streets/ limited access/ limited architectural variety
multiple curving streets/ limited access/ moderate to high architectural variety

The declining popularity of trolley transportation and the corresponding increase in the use of the automobile may account for the tendency of developers later in the period to limited access to the subdivisions that they created. By limiting access, they limited the volume of traffic that traveled along the residential streets. In addition, they could enhance a sense of community among the property owners by protecting residents from the encroachment of strangers who used subdivision streets as a means of crossing from one part of the county to another.

Because of the differing ages of the subdivisions, the level of architectural variety will frequently vary according to the length of the time period during which dwellings could be constructed. The older subdivisions can be expected to have a larger number of styles simply because houses could be and were built over several decades. Newer subdivisions have fewer decades of existence during which construction could take place and therefore have fewer styles among their dwellings.

Physical Criteria for Evaluation of Subdivisions

The initial basic criterion for identification of a subdivision to be included in the suburbanization historic context is that it conform to the definition of subdivision on which the context is based. A subdivision must be a residential community established during the specified time period, distant from the center of Wilmington, but tied to it by employment. This bars from consideration working housing built for employees of firms whose manufacturing sites also had a suburban location. Likewise, it excludes isolated dwellings that were built in a geographic location that was distant from the city but which were not part of a specifically planned set of streets and building lots. Although the scheme may be as simple as half a dozen lots along a dead-end lane, if there is evidence that the developer planned to put his subdivision of land to residential use, it might be considered eligible for inclusion. Although filing plans for proposed subdivisions was voluntary in New Castle County, many developers supplied the county with copies of proposed residential subdivisions and these maps constitute documentary testimony of the developers' intentions.

The physical criteria for suburban subdivisions should adhere to the following standards; potential historic resources must also meet criteria of integrity. As noted in Chapter I, to be considered eligible for consideration for listing on the National Register of Historic Places under the context established for suburbanization in the vicinity of Wilmington, a historic resource should have not only the physical attributes discussed here, but also at least one associative characteristic as identified in Chapters IV and V.

The physical characteristics specific to the consideration of a subdivision in the historic context for suburbanization relate to the four traits discussed above:

1. the degree to which streets in the subdivision are straight or curving;
2. whether the subdivision is made up of only one or two streets or of three or more;
3. whether access is limited to a single road into the subdivision;
4. the degree of architectural variety among subdivision dwellings.

These characteristics identify the features that define a subdivision. In order to be considered eligible for nomination to the National Register of Historic Places under the historic context for suburbanization, a subdivision must possess three of these four characteristics in a form appropriate to the time period in which it was created. For example, an ideal subdivision from the 1910s would be expected to have multiple straight streets with several access roads and a high degree of architectural variety.

Once a property satisfies this definition of a subdivision, it must be evaluated for integrity and significance under the criteria established by the Secretary of the Interior. The Secretary's Standards specify seven areas to be considered when integrity is evaluated: location, design, setting, materials, workmanship, feeling, and association.

Integrity in terms of design, setting, and feeling addresses the questions of how the landscape that is the subdivision has survived with the original planner's hopes and expectations largely unimpaired. The original physical layout of the plan must still be there. No portions of the subdivision can have been destroyed by the invasion of a major highway or industrial plant. Most dwellings built early in the subdivision's existence must still be standing and, if construction of houses took place over several decades, representative examples of each period should be extant. If many older dwellings have been lost or if much of the construction has been recent in-fill, the integrity of the entire subdivision will have been compromised and the subdivision cannot be considered eligible.

Although the property type is a landscape rather than a building, the integrity of materials and workmanship may still be considered in an examination of the landscaping and the subdivision infrastructure. Many developers promised to plant trees or shrubs or to install sidewalks and curbs when they first marketed their new subdivisions. To the degree that such promises were actually kept, the survival of stands of trees or of hedges should be ascertained and the condition of concrete walks must be assessed to determine whether sufficient integrity exists to allow considering the subdivision eligible. If all remnants of a developer's efforts to add infrastructure to his subdivision have vanished, workmanship and materials may be judged to be fatally compromised.